In the Claims:

1 (currently amended). A method of producing an electrode configuration, which comprises the following steps:

forming a first conductive layer of the electrode configuration of a material which is substantially unetchable by chemical dry-etching;

forming a second conductive layer of the electrode configuration on the first conductive layer from a material which is etchable by chemical dry-etching;

structuring the second conductive layer to form a structured second layer; ~~and~~

chemical-physical dry etching the first conductive layer while using the second structured layer as a mask; and

applying at least one insulation layer on the electrode configuration, and structuring the insulation layer to form at least two contact holes with different depths.

2 (currently amended). The method according to claim 1, wherein the chemical-physical dry etching step comprises etching the first conductive layer with a plasma etching process.

3 (currently amended). The method according to claim 1, which comprises, during the chemical-physical dry etching step of the second conductive layer, providing at least one reactive substance which reacts with the material of the second conductive layer to form a non-volatile compound on the surface of the second conductive layer.

4 (original). The method according to claim 3, wherein the reactive substance is a reactive gas.

5 (original). The method according to claim 4, wherein the reactive gas is a gas selected from the group consisting of oxygen, nitrogen, hydrogen, halogens, gaseous halogen compounds, and a mixture thereof.

6 (currently amended). The method according to claim 1, which comprises providing an inert gas during the step of chemical-physical dry etching the first conductive layer.

7 (currently amended). The method according to claim 1, wherein the chemical-physical dry etching step of the first conductive layer is performed with an etching process selected from the group consisting of reactive ion etching, magnetically enhanced reactive ion etching, electron cyclotron resonance etching, and inductively coupled plasma etching.

8 (currently amended). The method according to claim 1, further comprising:

~~applying at least one insulation layer on the electrode configuration, and structuring the insulation layer to form at least one contact hole to the electrode configuration; and~~

depositing a conductive layer and filling in the contact ~~hole~~ holes.

9 (currently amended). The method according to claim ~~8~~ 1, wherein the insulation layer is a silicon oxide layer.

10 (currently amended). The method according to claim ~~8~~ 1, wherein the applying step comprises producing a silicon oxide layer by a TEOS process.

11 (currently amended). The method according to claim ~~8~~ 1, wherein the applying step comprises producing a silicon oxide layer by a silane process.

12 (currently amended). The method according to claim ~~8~~ 1, wherein the insulation layer contains a silicon layer.

13 (original). The method according to claim 8, wherein the depositing step comprises depositing a material selected from the group consisting of aluminum, tungsten, and copper.

14 (previously presented). The method according to claim 1, further comprising chemical dry etching the second conductive layer while using the first structured layer as a barrier for the chemical dry-etching.

15-20 (cancelled).

21 (previously presented). The method according to claim 1, wherein the material for forming the first conductive layer is selected from the group consisting of a 4d transition metal, a 5d transition metal, a conductive nitride thereof, and a conductive oxide thereof.

22 (previously presented). The method according to claim 1, wherein the material for forming the first conductive layer is selected from the group of platinum metals.